

# DH-IPC-HFW3441DGP-AS-4G

## 4MP IR Fixed-focal Bullet WizSense 4G Network Camera



### Series Overview

With advanced deep learning algorithm, Dahua WizSense 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

### Functions

#### SMD 3.0

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

#### 4G

With a built-in high-performance 4G mobile network module, the camera can be directly registered to cloud platforms after a 4G SIM card has been inserted into it. It can be installed anywhere without the hassle of network cables. Users can perform real-time monitoring and remote control of the camera from a mobile client through 4G network.

#### Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

#### Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion) are largely reduced.

- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light/IR LED.
- Sound and light alarm linkage. When the alarm is triggered, the sound and light will be linked.
- Built in high-performance 4G Module that suits all mobile networks. Installation is no longer limited to wired networks. Please test the local 4G network with the camera before use.
- Built-in PIR sensor that detects human body through passive infrared which is sensitive to body temperature.
- Built-in 8 GB eMMC memory chip that protects key records from being lost.
- Intrusion, tripwire (support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, audio detection, SD card full, SD card error, network disconnection, IP conflict and illegal access.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; RS485:1 (Only report the information of solar battery, such as power and battery level), Supports max. 256 G Micro SD card; built in MIC and speaker; support two-way talk.
- IP67 protection.
- SMD 3.0.



#### Protection (IP67)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

#### Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

**Technical Specification**

**Camera**

|                            |   |
|----------------------------|---|
| Image Sensor               | 1/3" CMOS   |
| Max. Resolution            | 2688 (H) × 1520 (V)   |
| ROM                        | 128MB   |
| RAM                        | 256MB   |
| Scanning System            | Progressive   |
| Electronic Shutter Speed   | Auto/Manual 1/3 s–1/100,000 s   |
| Min. Illumination          | 0.01 Lux@F1.6 (Color,30IRE)<br>0.001 Lux@F1.6 (B/W,30IRE)<br>0 lux (Illuminator on)   |
| S/N Ratio                  | >56 dB  |
| Illumination Distance      | IR: 50 m (164.04 ft)<br>Warm light: 30 m (98.43 ft)   |
| Illuminator On/Off Control | Auto;Manual   |
| Illuminator Number         | 1 (IR LED); 1 (Warm light)  |
| Angle Adjustment           | Pan: 0°–360°<br>Tilt: –60°–0°<br>Rotation: 0°–360°  |
| PIR Sensor Distance        | 10 m (the height of device is 2.5 m, placed horizontally)<br>5 m (the height of the device is 2 m, placed at an angle of 30° from the horizontal) |

**Lens**

|                      |  |                     |                    |                   |                  |
|----------------------|--|---------------------|--------------------|-------------------|------------------|
| Lens Type            | Fixed-focal  |                     |                    |                   |                  |
| Lens Mount           | M12  |                     |                    |                   |                  |
| Focal Length         | 2.8 mm; 3.6 mm; 6 mm   |                     |                    |                   |                  |
| Max. Aperture        | 2.8 mm: F1.6<br>3.6 mm: F1.6<br>6 mm: F1.6   |                     |                    |                   |                  |
| Field of View        | 2.8 mm: H: 102°; V: 54°; D:121°<br>3.6 mm: H: 84°; V: 42°; D:101°<br>6 mm: H: 52°; V: 48°; D:61° |                     |                    |                   |                  |
| Iris Control         | Fixed  |                     |                    |                   |                  |
| Close Focus Distance | 2.8 mm: 0.9 m (2.95 ft)<br>3.6 mm: 1.7 m (5.58 ft)<br>6 mm: 3.2 m (10.50 ft)                     |                     |                    |                   |                  |
| DORI Distance        | Lens   | Detect              | Observe            | Recognize         | Identify         |
|                      | 2.8 mm   | 63.6 m (208.66 ft)  | 25.4 m (83.33 ft)  | 12.7 m (41.67 ft) | 6.4 m (21.00 ft) |
|                      | 3.6 mm   | 85.4 m (280.18 ft)  | 34.2 m (112.20 ft) | 17.1 m (56.10 ft) | 8.5 m (27.89 ft) |
|                      | 6 mm   | 124.0 m (406.82 ft) | 49.6m (162.73 ft)  | 24.8m (81.36 ft)  | 12.4m (40.68 ft) |

**Video**

|                   |   |
|-------------------|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)  |
| Video Frame Rate  | Main stream: 2688 × 1520 @ (1–25/30 fps )<br>sub stream: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps)<br>Sub stream 1: 1920 × 1080 @ (1–25/30 fps) |
| Stream Capability | 3 streams   |

|                             |  |
|-----------------------------|--|
| Resolution                  | 4M (2688 × 1520); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960 ); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Bit Rate Control            | CBR/VBR  |
| Video Bit Rate              | H.264: 32 kbps–8192 kbps<br>H.265: 32 kbps–8192 kbps   |
| Day/Night                   | Auto(ICR)/Color/B/W  |
| BLC                         | Yes  |
| HLC                         | Yes  |
| WDR                         | 120 dB   |
| Scene Self-adaptation (SSA) | Yes  |
| White Balance               | Auto; natural; street lamp; outdoor; manual; regional custom   |
| Gain Control                | Auto   |
| Noise Reduction             | 3D NR  |
| Motion Detection            | OFF/ON (4 areas, rectangular)  |
| Region of Interest (RoI)    | Yes (4 areas)  |
| Smart Illumination          | Yes  |
| Mirror                      | Yes  |
| Privacy Masking             | 4 areas  |

**Audio**

|                   |                            |
|-------------------|----------------------------|
| Built-in MIC      | Yes                        |
| Built-in Speaker  | Yes                        |
| Audio Compression | G.711a;G.711Mu; G.726; PCM |

**Alarm**

|             |  |
|-------------|--|
| Alarm Event | SD card error; SD card full; IP conflict; illegal access; motion detection; video tampering; Scene Changing; audio detection; security exception; PIR alarm; external alarm; low battery alarm; light alarm; sound alarm |
|-------------|--|

**Network**

|                  |   |
|------------------|---|
| Network Port     | RJ-45 (10/100 Base-T)   |
| Frequency        | LTE FDD:B1/3/5/7/8/20/28<br>LTE TDD:B38/40/41<br>WCDMA:B1/5/8<br>GSM/GPRS/EDGE:B3/5/8   |
| SDK and API      | Yes   |
| Cyber Security   | Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade |
| Network Protocol | IPv4; IPv6; HTTP;TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P  |
| Interoperability | ONVIF (Profile S/Profile G); CGI  |
| User/Host        | 20 (Total bandwidth: 80 M)  |

|                     |  |
|---------------------|--|
| Storage             | Built in eMMC (8 GB); FTP;SFTP; Micro SD card (support max. 256 GB); NAS |
| Browser             | IE<br>Chrome<br>Firefox  |
| Management Software | DSS; DMSS  |
| Mobile Client       | iOS; Android   |

## Certification

|                |  |
|----------------|--|
| Certifications | CE-LVD: EN62368-1;<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU;<br>CE-RED: Radio Equipment Directive 2014/53/EU;<br>FCC: 47 CFR FCC Part 15; Subpart B |
|----------------|--|

## Port

|              |   |
|--------------|---|
| Audio Input  | 1 channel (RCA port)  |
| Audio Output | 1 channel (RCA port)  |
| Alarm Input  | 1 channel in: 5 mA 3–5 VDC  |
| Alarm Output | 1 channel out: 300 mA 12 VDC  |
| RS-485       | 1 (Only report the information of solar battery, such as power and battery level) |

## Power

|                   |   |
|-------------------|---|
| Power Supply      | 12 VDC  |
| Power Consumption | Sleep Mode: 0.03 W<br>General Mode: 4 W<br>Power Saving Mode: 2 W<br>Max. (4G pulling stream+IR+speaker+warning light): 7.5 W |

## Environment

|                       |                                      |
|-----------------------|--------------------------------------|
| Operating Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
| Operating Humidity    | ≤ 95%                                |
| Storage Temperature   | -40 °C to +60 °C (-40 °F to +140 °F) |
| Protection            | IP67                                 |

## Structure

|                      |  |
|----------------------|--|
| Casing               | Metal + plastic  |
| Product Dimensions   | 132 mm × 219 mm × 179 mm (5.20" × 8.62" × 7.05")<br>(L × W × H)  |
| Packaging Dimensions | 280 mm × 239 mm × 146 mm (11.02" × 9.41" × 5.75")<br>(L × W × H) |
| Net Weight           | 680 g (1.50 lb)  |
| Gross Weight         | 1180 g (2.60 lb)   |

## Ordering Information

| Type        | Model                   | Description  |
|-------------|-------------------------|--|
| 4MP Camera  | DH-IPC-HFW3441DGP-AS-4G | 4MP IR Fixed focal Bullet WizSense 4G Network Camera |
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|             | DH-IPC-HFW3441DGP-AS-4G | 4MP IR Fixed focal Bullet WizSense 4G Network Camera |
| Accessories | PFB121W                 | Wall Mount Bracket                                   |
|             | PFA162                  | Universal Joint                                      |
|             | PFA150                  | Pole Mount Bracket                                   |
|             | PFA121                  | Water-proof Junction Box                             |
|             | PFA156                  | Pole Mount Bracket                                   |
|             | PFM900-E                | Integrated Mount Tester                              |
|             | TF-P100                 | MicroSD Memory Card                                  |
| PFM321D     | 12 VDC 1A Power Adapter |  |

## Accessories

### Included:



PFB121W  
Wall Mount  
Bracket

### Optional:



PFA162  
Universal  
Joint



PFA150  
Pole Mount  
Bracket



PFA121  
Water-proof Junction  
Box



PFA156  
Pole Mount  
Bracket



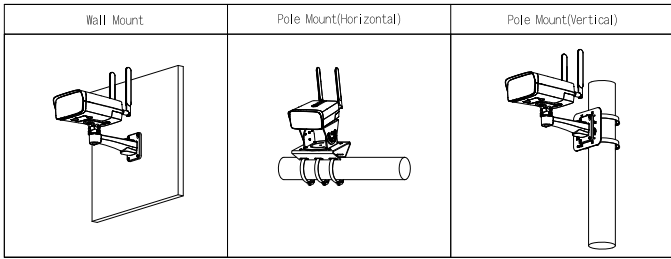
PFM900-E  
Integrated  
Mount Tester



TF-P100  
MicroSD  
Memory Card



PFM321D  
12 VDC 1A  
Power Adapter



**Dimensions (mm[inch])**

